Claims

1. Method for producing a light integrator (2), characterized by the following steps for forming a cavity of the integrator (2) having an inner reflective coating:

- fabrication of at least two parts (14, 14') from which the light integrator (2) can be assembled and whose surfaces, provided as inner sides of the cavity, are exposed;
- rimless reflective coating of at least the surfaces of the parts (14, 14') which are provided as inner sides of the cavity;
- assembly and fastening of the parts (14, 14').

2. Method for producing a light integrator (2) according to claim 1, characterized in that fastening is carried out by means of the following steps:

- covering the assembled parts (14, 14') with shrink tubing (24, 24', 24");
- shrinking the tubing until a suitable strength of the cavity integrator is achieved.

3. Light integrator (2) for homogenization of a light bundle entering an input surface (12) and exiting from an output surface (16), characterized in that it has a cavity with an inner reflective coating for conducting light, wherein the light integrator (2) is composed of at least two parts (14, 14') whose surfaces which are exposed prior to assembly and face inward after assembly are provided with a mirror layer.

4. Light integrator (2) according to claim 3, characterized in that one part is provided with a projection (20) engaging in a cutout (22) of the other part after assembly.

5. Light integrator (2) according to claim 4, characterized in that the inner sides and outer sides of the light integrator which form the cavity are planar, the light integrator (2) has the shape of a geometric prism with rectangular bottom and top surfaces provided as outlet and inlet surfaces (16, 12), and the projection and cutout (22) are rectangular, particularly square.

6. Light integrator (2) according to claim 5, characterized in that the light integrator comprises two T-shaped (14') and two I-shaped (14) side parts.

7. Light integrator (2) according to one of claims 1 to 6, characterized in that the parts (14, 14') are held together by means of at least one piece of shrink tubing (24).

8. Light integrator (2) according to claim 7, characterized in that shrink tubing (24) is arranged in the middle between the input surface (12) and output surface (16) for holding the parts (14, 14') together.

9. Light integrator (2) according to claim 7, characterized in that it has two pieces of shrink tubing (24', 24") enclosing the light integrator for holding the parts (14, 14') together in the vicinity of their input surface and output surface (12, 16).

10. Use of the light integrator (2) according to one of claims 3 to 9 for homogenization of the light originating from a light source which is provided for the illumination of an electronically controllable matrix (4) for showing image elements.

11. Use according to claim 10, characterized in that the matrix (4) is a tilting mirror matrix.